HW 1 (10 pts)

**Name**: YourName

Write your solution after the question. Show your work (i.e., the relevant python code). An example question has already been filled out for you. **Submit this file to Moodle.**

1. [0 pt] Compute the sum of 8, 9, and 10.

>>> 8 + 9 + 10

27

1. [1/2 pt] Compute the number of seconds in a year.
2. [1/2 pt] Compute the number of inches in 1 mile
3. [1 pt] Compute the number of 3 ft square tiles to cover the floor of a 9 by 12 ft room.
4. [1 pt] Compute the number of handshakes required for each person in a class of 19 to shake hands with all other classmates.
5. [1/2 pt] Compute 1/3 of 45.
6. [1 pt] The Andromeda galaxy is 2.9 million light years away. There are miles per light year. How many miles away is the Andromeda galaxy?
7. [1 pt] How many years would it take to travel to the Andromeda galaxy at 65 miles per hour?
8. [1 pt] Compute the factorial of 11.
9. [1/2 pt] Which of the following are legal variable names?
   1. \_abcd123
   2. 123abc\_
   3. abc123\_
   4. \_123
10. [1 pt] Draw a reference diagram to show the labels and objects after evaluating all statements.

A picture containing clock

Description automatically generated

1. [1 pt] What are the values of a and b after Python evaluates each of the following four statements?

A close up of a logo

Description automatically generated

1. [1 pt] What is the value of idx after Python evaluates all of the following statements?

A close up of a logo

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